

**KM-35F+** 

50Ω DC to 33 GHz 2.92 mm Male to 3.5 mm Female Straight

### **THE BIG DEAL**

- Ultra-wideband, DC to 33 GHz
- Low insertion loss, 0.09 dB Typ.
- Excellent VSWR, 1.04:1 Typ.
- Flat response



Generic photo used for illustration purposes only

| Model No.  | KM-35F+                       |
|------------|-------------------------------|
| Case Style | DJ3418                        |
| Connectors | 2.92 mm Male to 3.5 mm Female |

# +RoHS Compliant The +Suffix identifies RoHS Compliance. See our website for methodologies and qualifications

### **APPLICATIONS**

- Test & Measurement Equipment
- Radar, EW and ECM Defense Systems
- LTE & 5G MIMO Infrastructure

## **PRODUCT OVERVIEW**

Mini-Circuits' KM-35F+ is a coaxial 2.92mm Male to 3.5mm Female adapter supporting a wide range of applications from DC to 33 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The KM-35F+ features passivated stainless steel construction and measures only 0.81" in length.

### **KEY FEATURES**

| Features Advantages                                     |   |  |
|---|---|--|
| Wideband, DC to 33 GHz                                  | Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use     |  |
| Excellent VSWR, 1.04:1 Typ.                             | Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.           |  |
| Low insertion loss, 0.09 dB Typ.                        | Provides excellent signal power transmission from input to output.  |  |
| Passivated stainless steel construction.                | Stands up to wear and tear in demanding environments and provides excellent reliability.                              |  |
| Very wide operating temperature range,<br>-45 to +125°C | Withstands extreme operating conditions and is suitable for use near high power components where heat rise is common. |  |



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### **ELECTRICAL SPECIFICATIONS AT 25°C**

| Parameter       | Frequency (GHz) | Min. | Тур. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range | -               | DC   | -    | 33   | GHz   |
|                 | 0.01-10         | -    | 0.05 | 0.40 |       |
| Insertion Loss  | 10-20           | -    | 0.09 | 0.40 | dB    |
|                 | 20-33           | -    | 0.13 | 0.40 |       |
|                 | 0.01-10         | -    | 1.03 | 1.15 |       |
| VSWR            | 10-20           | -    | 1.04 | 1.15 | :1    |
|                 | 20-33           | -    | 1.05 | 1.15 |       |

# **MAXIMUM RATINGS**

| Parameter             | Ratings        |
|-----------------------|----------------|
| Operating Temperature | -45°C to 125°C |
| Storage Temperature   | -45°C to 125°C |

Permanent damage may occur if any of these limits are exceeded.



# Adapter Adapter

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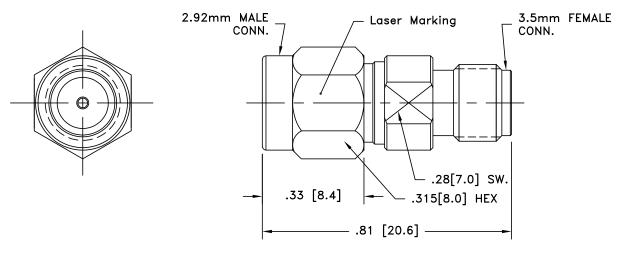
### **COAXIAL CONNECTIONS**

| Connector 1 | 2.92mm-Male  |
|-------------|--------------|
| Connector 2 | 3.5mm-Female |

### **CONNECTOR SPECIFICATIONS**

|                | Connector 1                  | Connector 2  |  |
|----------------|------------------------------|--------------|--|
| Connector Type | 2.92mm Male                  | 3.5mm Female |  |
| Orientation    | Straight                     |              |  |
| Impedance      | 50 Ω                         |              |  |
| Connector Body | Passivated Stainless Steel   |              |  |
| Contact        | Gold Plated Beryllium Copper |              |  |
| Insulator      | ULTEM-1000                   |              |  |
| Lock Ring      | Passivated Stainless Steel   |              |  |
| Gasket         | Silicone Rubber              |              |  |

# **OUTLINE DRAWING**



Weight: 4.7 grams

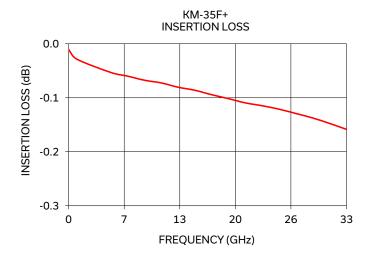
Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03; 3 PL ±.015

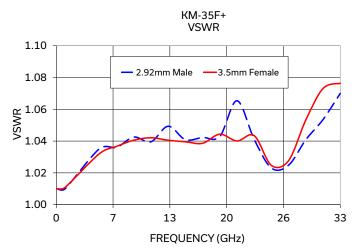
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### **TYPICAL PERFORMANCE DATA AND CHARTS**

| Frequency | Insertion Loss<br>(dB) | VSWR<br>(:1) |              |  |
|-----------|------------------------|--------------|--------------|--|
| (MHz)     |                        | 2.92mm Male  | 3.5mm Female |  |
| 0.01      | 0.01                   | 1.01         | 1.01         |  |
| 0.10      | 0.01                   | 1.01         | 1.01         |  |
| 1.00      | 0.03                   | 1.01         | 1.01         |  |
| 5.00      | 0.05                   | 1.04         | 1.03         |  |
| 7.00      | 0.06                   | 1.04         | 1.04         |  |
| 9.00      | 0.07                   | 1.04         | 1.04         |  |
| 11.00     | 0.07                   | 1.04         | 1.04         |  |
| 13.00     | 0.08                   | 1.05         | 1.04         |  |
| 15.00     | 0.09                   | 1.04         | 1.04         |  |
| 17.00     | 0.09                   | 1.04         | 1.04         |  |
| 19.00     | 0.10                   | 1.04         | 1.04         |  |
| 21.00     | 0.11                   | 1.07         | 1.04         |  |
| 23.00     | 0.11                   | 1.04         | 1.04         |  |
| 25.00     | 0.12                   | 1.02         | 1.02         |  |
| 27.00     | 0.13                   | 1.02         | 1.03         |  |
| 29.00     | 0.14                   | 1.04         | 1.05         |  |
| 31.00     | 0.15                   | 1.05         | 1.07         |  |
| 33.00     | 0.16                   | 1.07         | 1.08         |  |





#### NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

